Working Paper Series

How Large Has the Federal Financial Safety Net Become?

WP 10-03R

Nadezhda Malysheva
Federal Reserve Bank of Richmond

John R. Walter
Federal Reserve Bank of Richmond

THE FEDERAL RESERVE BANK OF RICHMOND
RICHMOND ▪ BALTIMORE ▪ CHARLOTTE

How Large Has the Federal Financial Safety Net Become?*

Nadezhda Malysheva and John R. Walter
Federal Reserve Bank of Richmond

March 2010
Revised: February 2013

Working Paper No. 10-03R

Abstract

Legislative and regulatory actions taken in response to the financial turmoil which occurred between 2007 and 2009 expanded the extent to which financial institution liabilities were protected by federal government guarantees: i.e., these actions expanded the federal financial safety net. How large has the safety net become? Walter and Weinberg (2002) measured and examined the size of the safety net as it stood in 1999. We estimate the size of the safety net as of the end of 2008, after the creation of a number of government programs meant to back financial liabilities. We use methods similar to those employed by Walter and Weinberg and find that the safety net has expanded significantly. We briefly describe our results and provide a table detailing them.

JEL classifications: G20, G28, H20

Keywords: Safety net, deposit insurance, too big to fail

---

*The authors would like to thank Jason Annis, Marc Chumney and Tim Pudner for providing data and valuable advice. The views expressed in this article are those of the authors and do not necessarily reflect those of the Federal Reserve Bank of Richmond or the Federal Reserve System.

Corresponding author: John.Walter@rich.frb.org

1. Expansion of the Safety Net

In 2002 Walter and Weinberg examined the federal financial safety net as it stood at the end of 1999 (Walter and Weinberg 2002, available at http://www.cato.org/pubs/journal/cj21n3/cj21n3-2.pdf). At the time, the authors estimated that approximately 45 percent of all financial firm liabilities were protected by the safety net. As one would expect, this percentage has increased recently, as the financial market turmoil that began in 2007 led federal government agencies to expand the range of institutions and the types of liabilities protected by the safety net.

2. The Safety Net Defined

Walter and Weinberg defined the federal financial safety net to consist of all explicit or implicit government guarantees of private financial liabilities. Private financial liabilities are those owed by one private market participant to another. As used by Walter and Weinberg the phrase *government guarantee* means a federal government commitment to protect lenders from losses due to a borrower's default (Walter and Weinberg, 2002).[1]

Walter and Weinberg also reviewed the justifications typically given for constructing a safety net for financial firms and reviewed the distortionary effects of a safety net on the willingness of financial firms to undertake risky investments. Additionally the authors discussed the effect of a safety net on financial market efficiency.

3. Legislative and Regulatory Changes that Expanded the Safety Net

[1] In addition to estimating the proportion of financial firm liabilities backed by the federal government, Walter and Weinberg also estimated the proportion of nonfinancial firm and household liabilities with such backing.

As shown in the table below, we re-estimated the proportion of financial firm liabilities protected as of the end of 2008. By the end of 2008 a number of government programs had been established to address turmoil in the financial markets. Employing methods similar to those used by Walter and Weinberg when they measured the size of the safety net for the end of 1999, we find that as of the end of 2008 about 57.5 percent of financial firm liabilities were protected by the federal safety net.

One of the most important reasons for the increase from 1999 to 2008 is the enlarged portion of banking firm liabilities that market participants are likely to consider protected: banking and savings firm liabilities with an implicit backing. In 1999 implicitly guaranteed liabilities of banks and savings institutions amounted to about 13 percent of all of these firms' liabilities (15.9 percent for commercial banks and 4.2 percent for savings institutions), or $820 billion.

How did Walter and Weinberg determine which institutions to include as those having an implicit guarantee and which liabilities issued by these institutions might be covered? As the authors noted, the critical question is whether market participants believe that a given institution will be protected, even though official policy may not state that all of these liabilities are explicitly protected. As of 1999 Walter and Weinberg argued that market participants were likely to assume that certain holders of liabilities in the largest 21 banking companies and the two largest thrift companies would be protected in the event that these firms became troubled. These 21 banking companies and two thrifts all had assets (in 1999 dollars) of more than $50 billion, which was greater than the smallest of the 11 institutions identified by the Comptroller of the Currency in 1984 as potentially too big to fail (Walter and Weinberg, p. 381). The liabilities Walter and Weinberg assumed the market would be highly likely to view as protected were deposits of more than $100,000 (deposits of less than $100,000 are included in the "Explicitly Guaranteed Liabilities" column), fed funds loans made to the 21 banks and two thrifts and repo transactions with these banks and thrifts.

Support for Stress Tested Financial Companies

Where should the line be drawn at the end of 2008, after the government had responded aggressively to problems in financial firms during the financial turmoil of that year? Here we maintain that market participants were very likely to assume that the liabilities of the financial firms that were stress tested early in 2009 (participants in the Supervisory Capital Assessment Program) had a strong likelihood of receiving federal backing if they suffered financial distress. A number of these firms did, in fact, receive government aid in the form of capital injections in 2008 and early 2009. This aid reduced the likelihood that *all* liability holders of the protected firms would suffer losses, so here we include *all* liabilities of the stress tested banking institutions in our safety net calculation. The total liabilities of the 19 stress-tested bank holding companies, less their liabilities that were explicitly covered by deposit insurance, summed to $7.8 trillion, or about 48 percent of all banking and savings firm liabilities.

Increased Ceiling on Insured Deposits

Several Federal Deposit Insurance Corporation (FDIC) programs expanded the explicit portion of the safety net for banks and thrifts ("Explicitly Guaranteed Liabilities" column) beyond the long-standing $100,000 coverage for deposits (which are also included in the "Explicitly

Guaranteed Liabilities" column).[2] For example, in October 2008 the Emergency Economic Stabilization Act of 2008 increased FDIC deposit insurance coverage from $100,000 to $250,000 (Federal Deposit Insurance Corporation, October 3, 2008). Data was not collected, as of December 2008, on the amount of bank and thrift deposits between $100,000 and $250,000. Consequently, we estimate this amount and then include it in the "Explicitly Guaranteed Liabilities" column for Banking and Savings Firms. To estimate the amount of deposits between $100,000 and $250,000 we increase the amount of deposits that were insured under the old coverage limits (data for which was collected as of December 2008) by 15 percent. We chose 15 percent because it was the percentage used by the Congressional Budget Office (CBO), in consultation with the FDIC, when the CBO estimated the likely effect on government revenues and expenditures of raising the deposit insurance ceiling to $250,000 (Congressional Budget Office, 2009, p. 3). Therefore, we estimate that the additional coverage adds $714 billion to the explicitly guaranteed liabilities of banking and savings firms.

Transaction Account Guarantee Program

Further, in October 2008 the FDIC implemented a program to insure uninsured deposits (those deposits in accounts containing more than $250,000) in noninterest bearing transactions accounts for those insured banks and thrifts wishing to participate (Federal Deposit Insurance Corporation, October 14, 2008). This program, the Transaction Account Guarantee Program, added $722 billion to our "Explicitly Guaranteed Liabilities" column for Banking and Savings Firms (Federal Deposit Insurance Corporation, September 30, 2009).

[2] Since April 2006, deposits in certain retirement accounts at banks and thrifts have been protected by the FDIC up to $250,000 (Federal Deposit Insurance Corporation, March 14, 2006). Deposits in such accounts, up to the $250,000 ceiling, are included in the "Explicitly Guaranteed Liabilities" column of our table.

Debt Guarantee Program

Last, in October 2008 the FDIC offered, to those banking and savings institutions that chose to participate, to insure senior unsecured debt issued by such institutions. As of December 31, 2008, the program was insuring $224 billion in debt (Federal Deposit Insurance Corporation, December 31, 2008). While this $224 billion should rightfully be included in our "Explicitly Guaranteed Liabilities" column for Banking and Savings Firms, we are unable to obtain sufficient data to ensure that we do not double count this debt; consequently, we exclude it altogether.[3] Because we have excluded this guaranteed debt, our "Explicitly Guaranteed Liabilities" column is smaller than it should be by $224 billion.

4. Other Components of the Safety Net

As in 1999, for 2008 we include the liabilities of government sponsored enterprises (direct GSE liabilities plus the dollar amount of mortgage backed security (MBS) guarantees) in the "Implicitly Guaranteed Liabilities." While the Treasury made clear its support for Fannie Mae and Freddie Mac once these two financial firms were placed in conservatorship in September 2008, the support was not as strongly stated as that given to insured deposits, so we leave these liabilities in the implicit column.[4]

We estimate the amount of private pensions explicitly guaranteed in 2008 by the Pension Benefit Guarantee Corporation (PBGC) based on the latest private pension data available, which

[3] The FDIC does not report institution-specific data on guaranteed debt issuance so we cannot determine the amount of such issues by the stress-tested institutions in the "Implicitly Guaranteed Liabilities" column. Therefore, we are unable to deduct this debt from these institutions' liabilities (which we can do for other explicitly insured liabilities issued by the stress-tested institutions). We would be double-counting the debt by including it in both the explicit and implicit columns. Some institution-specific information is available for such debt issues (typically debt issues greater than one year in maturity) but the information is incomplete.

[4] We treat Fannie Mae and Freddie Mac as private entities and therefore include their liabilities in our table, consistent with the way Walter and Weinberg treated these entities, even though the status of Fannie Mae and Freddie Mac as privately owned firms is more ambiguous now than in 1999.

are data for 2006 (Pension Benefit Guarantee Corporation 2009, pp. 83, 105). Our admittedly imprecise 2008 figure is derived by adjusting the 2006 figure by a growth estimate developed based on 1) past years' (prior to 2006) private pension growth, and on 2) information on possible pension growth patterns during 2007 and 2008 gained from a conversation with a pension economist.

5. Conclusion

Recent government actions by legislators and financial regulators expanded the federal financial safety net. As discussed in Walter and Weinberg, this expansion has likely to have produced (and will continue to produce) distortionary effects on financial firm risk taking.

December 2008 (Billions of dollars)	Explicitly Guaranteed Liabilities	Implicitly Guaranteed Liabilities	Explicitly and Implicitly Guaranteed Liabilities	Total Liabilities
Financial Firms				
Banking and Savings Firms	6,192	7,833	14,025	16,315
	38.0%	48.0%	86.0%	
Credit Unions	659		659	743
	88.7%		88.7%	
Government-Sponsored Enterprises				
Fannie Mae		3,245	3,245	3,245
Freddie Mac		2,284	2,284	2,284
Farm Credit System		189	189	189
Federal Home Loan Banks		1,298	1,298	1,298
Total		7,016	7,016	7,016
		100.0%	100.0%	
Private Employer Pension Funds	2,499		2,499	2,923
	85.5%		85.5%	
Other Financial Firms		806	806	16,509
		4.9%	4.9%	
Total for Financial Firms	9,350	15,656	25,006	43,506
	21.5%	**36.0%**	**57.5%**	

Figures may not sum exactly due to rounding.

LEGEND TO THE TABLE

Banking and Savings Firms

Explicitly Guaranteed Liabilities

- FDIC-insured deposits of all Commercial Banks and Savings Institutions including transaction accounts covered by TAGP of all Commercial Banks and Savings Institutions

Implicitly Guaranteed Liabilities

- Total liabilities of the 19 stress-tested institutions
- Less FDIC-insured deposits and accounts covered by TAGP of the 19 stress-tested institutions

Credit Unions

Explicitly Guaranteed Liabilities

- NCUA-insured shares and deposits

Government Sponsored Enterprises

Implicitly Guaranteed Liabilities of**:**

Fannie Mae

- Total liabilities
- Fannie Mae mortgage-backed securities held by third parties
- Other guarantees

Freddie Mac

- Total liabilities
- Freddie Mac Participation Certificates and Structured securities held by third parties

Farm Credit System

- Total liabilities
- Farmer Mac guarantees

Federal Home Loan Banks

- Total liabilities

Private Employer Pension Funds

Explicitly Guaranteed Liabilities

- Pension liabilities backed by the PBGC

Other Financial Firms

Explicitly Guaranteed Liabilities

- Total liabilities of AIG, less FDIC-insured deposits of AIG Federal Savings Bank

The figures in the column "Explicitly and Implicitly Guaranteed Liabilities" are the sum of the numbers in the first two columns "Explicitly Guaranteed Liabilities" and "Implicitly Guaranteed Liabilities."

DATA APPENDIX TO THE TABLE

Banking and Savings Firms – Explicitly Guaranteed Liabilities:

"Estimated FDIC-insured deposits" of Commercial Banks, Savings Institutions, and U.S. Branches of Foreign Banks (Federal Deposit Insurance Corporation, December 31, 2008, Table III-B, p. 17). The total estimated insured deposits figure for all banks, thrifts and branches of foreign banks is multiplied by 1.15 to account for the October 2008 increase in FDIC insurance coverage to $250,000. We chose the multiplier 1.15 based on a CBO estimate of the percentage increase in covered deposits resulting from the change in the coverage limit (Congressional

Budget Office, 2009, p. 3). In addition, we include the "Amount Guaranteed"[5] of non-interest-bearing transaction accounts figure from Quarterly Banking Profile (Federal Deposit Insurance Corporation, September 30, 2009, Table III-C, p. 20).

Banking and Savings Firms – Implicitly Guaranteed Liabilities:

Total Liabilities of the 19 stress-tested institutions found in the Y-9C (quarterly bank holding company financial reports) or 10K of each institution, less the explicitly guaranteed deposits of the banks and savings institutions owned by these 19 firms. The estimated FDIC-insured deposits and the guaranteed amount in non-interest-bearing transaction accounts for each bank can be found on the FDIC's website in the "Institution Directory" webpage (http://www2.fdic.gov/idasp).

Banking and Savings Firms – Total Liabilities:

Total liabilities from the following sources: For large (consolidated assets of over $500 million) bank holding companies, Consolidated Financial Statements for Bank Holding Companies (FR Y9C); for small (consolidated assets less than $500 million) bank holding companies, Parent Company Only Financial Statements for Small Bank Holding Companies (FR Y9SP)—from which consolidated total liabilities can be derived; for banks not owned by a bank holding company, Consolidated Reports of Condition and Income for a Bank (FFIEC 031 and FFIEC 041); and for all thrift liabilities, Thrift Financial Reports. To the sum of these figures, we also add the dollar amount of nonbank total liabilities of the following three bank holding companies (found in their 10K reports): American Express, Goldman Sachs and Morgan Stanley which did not begin filing bank holding company reports (Y9C reports) until 2009.

Credit Unions – Explicitly Guaranteed Liabilities:

Total Insured Shares at the $250,000 limit (National Credit Union Administration, 2008).

Credit Unions – Total Liabilities:

Board of Governors (2009), Table L.115 – *Credit Unions,* "Total liabilities."

Government-Sponsored Enterprises:

Fannie Mae:

Total Liabilities, plus Fannie Mae MBS held by third parties, plus Other Guarantees found in the Fannie Mae 10K, "Item 6. Selected Financial Data" (p. 81).

Freddie Mac:

10K report of Freddie Mac, "Total liabilities" ("Consolidated Balance Sheets," p.183), plus "Total PCs and Structured Securities issued" ("Item 6. Selected Financial Data," p.58), less "Total Freddie Mac PCs and Structured Securities held" in Freddie Mac portfolio (Table 24, p.93).

Farm Credit System:

Farm Credit System (2009), "Total liabilities" ("Combined Statement of Condition Data," p. 3), plus "Farmer Mac guarantees" (p.12).

Federal Home Loan Banks:

Federal Home Loan Banks (2009), "Total liabilities" (Combined Statement of Condition," p. 182).

Private Employer Pension Funds – Explicitly Guaranteed Liabilities:

Liabilities of all pension funds insured by the Pension Benefit Guarantee Corporation (which insures only defined benefit plans) were $2,505 billion in 2006, the latest date for which

[5] The "Amount Guaranteed" is the dollar amount of all non-interest-bearing transaction accounts having denominations over $250,000, less the first $250,000 in each account, since the first $250,000 is already covered by standard deposit insurance.

data are reported (Pension Benefit Guarantee Corporation, 2009, pp. 83, 105). This figure is inflated by 5 percent to obtain the estimated liabilities for December 31, 2008, to obtain our estimate of 2008 covered pension liabilities ($2,630 billion). We inflate by 5 percent based on a conversation with a pension economist. That conversation indicated that defined benefit pensions are expected to grow very little during 2007 and more-slowly-than-average in 2008. Therefore, for our estimate of 2008 covered pension liabilities we assume no growth in 2007 and a 5 percent growth rate in 2008 (which is slower than the average growth rate over the previous six years, 2000 – 2006, which was about 9 percent [Pension Benefit Guarantee Corporation 2009, pp. 83, 105]). Since PBGC covers pensions only up to a specified maximum payment per year, a portion of beneficiaries' pensions in guaranteed plans—those with pensions paying above this maximum—are not insured. According to the PBGC, this portion is estimated to be 4 to 5 percent (Pension Benefit Guarantee Corporation, 2007, p. 24 and Pension Benefit Guarantee Corporation 1996: footnote to Table B-5). To arrive at the guaranteed portion of PBGC guaranteed pension fund liabilities, we multiplied total 2008 fund liabilities ($2,630 billion) by .95 to yield $2,499 billion.

Private Employer Pension Funds – Total Liabilities:

There appears to be no data on the total liabilities of all private employer defined benefit pension funds. Therefore, we estimate our total liability figure based on PBGC data. To derive our figure, we begin with our previously-determined estimate of all private pension fund liabilities that are included in PBGC ($2,630) and then divide it by .9 to arrive at our total liability figure of $2,923 billion. The PBGC insures only about two-thirds of private sector single-employer defined benefit plans, but almost all multi-employer plans (Pension Benefit Guarantee Corporation 2009, p. 5). Among the types of defined benefit plans PBGC does not insure are small (fewer than 25 employees) plans maintained by small professional service employers like doctors, lawyers, and accountants. Since the PBGC excludes only the smaller single-employer plans, and includes most multi-employer plans, we assume that it covers well more than 66 percent (i.e., two-thirds) of all liabilities, setting our estimate at 90 percent.

Other Financial Firms – Implicitly Guaranteed Liabilities:

"Total liabilities of AIG" found in its 10K report, less "Estimated insured deposits" of AIG Federal Savings Bank found on the FDIC's website in the "Institution Directory" webpage (http://www2.fdic.gov/idasp), multiplied by 1.15 to account for the increased FDIC-insured limit (Congressional Budget Office, 2009, p. 3).

Other Financial Firms – Total Liabilities:

Board of Governors (2009), Tables L.116 – Property-Casualty Insurance Companies, L.117 – *Life Insurance Companies*, L.126 – *Issuers of Asset-Backed Securities*, L.127 – *Finance Companies*, L.128 – Real Estate Investment Trusts, L.129 – *Security Brokers and Dealers*, L.131 – *Funding Corporations*, less taxes payable whenever a figure for taxes was reported on these tables.

REFERENCES

Board of Governors of the Federal Reserve System. September 17, 2009. Level Tables in Federal Reserve statistical release Z.1, "*Flow of Funds Accounts of the United States*." Available at: http://www.federalreserve.gov/releases/z1/20090917/z1r-4.pdf (accessed January 9, 2010).

Congressional Budget Office. 2009. "Cost Estimate for H.R. 786" February 23. Available at: http://www.cbo.gov/ftpdocs/100xx/doc10005/hr786.pdf (accessed January 8, 2010).

Farm Credit System. February 27, 2009. *Annual Information Statement – 2008.* New Jersey: Federal Farm Credit Banks Funding Corporation. Available at: http://www.farmcredit-ffcb.com/farmcredit/serve/public/finin/annin/report.pdf?assetId=128311 (accessed January 9, 2010).

Federal Deposit Insurance Corporation. March 14, 2006. "FDIC Insurance for Retirement Accounts Increased to $250,000." FDIC Press Release. Available at: http://www.fdic.gov/news/news/press/2006/pr06029.html (accessed January 9, 2010).

Federal Deposit Insurance Corporation. October 3, 2008. "Financial Institution Letters: Deposit Insurance Coverage, Temporary Increase in Coverage." FIL-102-2008. Available at: http://www.fdic.gov/news/news/financial/2008/fil08102.html (accessed January 9, 2010).

Federal Deposit Insurance Corporation. October 14, 2008. "FDIC Announces Plan to Free Up Bank Liquidity." FDIC Press Release. Available at: http://www.fdic.gov/news/news/press/2008/pr08100.html (accessed January 9, 2010).

Federal Deposit Insurance Corporation. December 31, 2008. "Table III-B: Estimated FDIC-Insured Deposits by Type of Institution." *Quarterly Banking Profile*. Available at: http://www2.fdic.gov/qbp/2008dec/dep3b.html (accessed January 9, 2010).

Federal Deposit Insurance Corporation. December 31, 2008. "Table IV-C: Debt Issuance Under Guarantee Program." *Quarterly Banking Profile*. Available at: http://www2.fdic.gov/qbp/2008dec/tlgp4c.html (accessed January 9, 2010).

Federal Deposit Insurance Corporation. September 30, 2009. "Table III-C: Transaction Account Guarantee Program." *Quarterly Banking Profile*. Available at: http://www2.fdic.gov/qbp/2009sep/tlgp3c.html (accessed January 9, 2010).

Federal Home Loan Banks. April 21, 2009. "Combined Statement of Condition." *Combined Financial Report 2008*. Available at: http://www.fhlb-of.com/specialinterest/financialframe2.html (accessed January 9, 2010).

National Credit Union Administration. 2008. Footnote 3 on p, 1. *2008 Yearend Statistics for Federally Insured Credit Unions*. Available at:

http://www.ncua.gov/Resources/Reports/statistics/Yearend2008.pdf (accessed January 9, 2010).

Pension Benefit Guarantee Corporation. 1997. *Pension Insurance Data Book, 1996*.

Pension Benefit Guarantee Corporation. 2007. *Pension Insurance Data Book, 2006*. Available at: http://www.pbgc.gov/docs/2006databook.pdf (accessed January 9, 2010).

Pension Benefit Guarantee Corporation. 2009. *Pension Insurance Data Book, 2008*. Available at: http://www.pbgc.gov/docs/2008databook.pdf (accessed January 9, 2010).

Walter, John R. and John A. Weinberg. 2002. "How Large Is the Federal Financial Safety Net?" *The Cato Journal* 21 (3): 369-93. Available at: http://www.cato.org/pubs/journal/cj21n3/cj21n3-2.pdf (accessed January 13, 2010).